

REMARKS

Claims 1 and 11-30 remain pending. Independent claim 1 has been amended to overcome 35 USC §112, first paragraph, rejections, and Applicants' arguments are presented to overcome the rejections of the claims on the merits based on the new combination of prior art. Accordingly, Applicants respectfully submit that the present application is in condition for allowance.

I. Claim Rejections - 35 USC §112, first paragraph

In the Office Action dated February 20, 2009, claims 1 and 11-30 are rejected under 35 USC §112, first paragraph, as failing to comply with the written description requirement.

The term “rigid” has been deleted from claim 1.

In addition, the phrase “such that the outer box is supported on an underlying surface via said supports when the bottom plate extends parallel to the underlying surface” has been deleted from claim 1. Further, the last few lines of claim 1 have been amended to state: “such that the outer box is supported on said wheels only when the outer box is inclined on a floor face.” This limitation finds support on page 2, lines 23-25; page 5, lines 4-9; and page 8, claim 3 of the present application, as filed.

Applicants respectfully submit that claims 1 and 11-30 are in full compliance with the written description requirement of 35 USC §112, first paragraph. Applicants respectfully request reconsideration and removal of the rejection.

II. Claim Rejections - 35 USC §103(a)

In the Office Action dated February 20, 2009, claims 1 and 11-30 are rejected under 35 USC §103(a) as being obvious over JP 11-011478 A and JP 11-350122 A.

Turning first to JP '122, it simply discloses a sputtering target. It clearly fails to provide any disclosure, suggestion or teaching relevant to how a fragile and expensive sputtering target is transported from a place of manufacture to a sputtering chamber within a sensitive workshop within a semiconductor manufacturing facility where the sputtering target is used during the formation of thin films for semiconductors and the like.

Accordingly, the above rejection relies entirely on JP '478 for all limitations recited in claim 1 of the present application relative to a transport box. Among the transport box limitations required by claim 1 of the present application, claim 1 requires:

“wheels for man-powered transport are mounted to said bottom plate adjacent only a rear edge of said bottom plate and not adjacent an opposite front edge of said bottom plate, the height of the supports is greater than the height that each of the wheels extends from the bottom plate of the outer box such that the outer box is supported on said wheels only when the outer box is inclined on a floor face.”

No new matter was added. For example, see page 5, lines 4-7, of the present application, as filed, and see page 2, lines 23-25; page 5, lines 4-9; and page 8, claim 3 of the present application, as filed.

In the Office Action, the following is stated relative to JP '478 and the limitations of claim 1 of the present application concerning the “wheels”:

“FIG. 1 also depicts rigid stationary supports to form hollows (ie. handle) [4] which can insert the claw part of a **fork lift truck having wheels that is man-powered** (p. 3, para 0024), where the wheels would be adjacent to only a rear edge of the palette [6] and not a front edge of said palette [6]. ... When the fork lift is attached to the outer box [8] via hollow [4] of the palette [6], said outer box is supported by **wheels of the fork lift** and **at a slight incline** since a side of the outer box [8] nearest the fork lift is supported and a side farthest from the fork lift is unsupported.”

Applicants respectfully submit that Paragraph No. 0024 of JP ‘478 merely states, as follows:

“[0024] As shown in drawing 1, the double box container 2 concerning one embodiment of this invention has the palette 6 with which the hollow 4 which can be insert the claw part of the lift means of a fork lift truck etc. is formed, and the outer packaging 8 with which it is equipped on this palette 6 enabling attachment and detachment and/or free folding.”

Applicants respectfully submit that FIGs. 1 and 3 of JP ‘478 merely disclose a typical pallet configuration to one of ordinary skill in the art with respect to transporting large sheets of material, such as sheets of glass (i.e., see FIGs. 3 and 4 of JP ‘478). The pallet of JP ‘478 is **without wheels** and has slots (4) that enable the insertion of the tangs of a separate fork lift truck or like piece of separate equipment having a “lift means”. Thus, one of ordinary skill in the art is taught by JP ‘478 that transport and movement of the double box container carrying sheets of glass from a manufacturing plant to a desired location requires the use of separate equipment having “lift means”, such as motorized fork lift trucks.

Further, the wheels required by claim 1 of the present invention are not wheels of a separate piece of equipment, such as a fork lift truck. The wheels of the present invention are attached or mounted directly to the bottom plate of the outer box of the transport box. As a result, the wheels of the present invention yield a function enabling man-powered transport (without the use of other separate equipment) when the transport box by itself is tilted on a floor

face. The double-box container of JP '478 is without wheels and cannot provide the above stated function.

Accordingly, the container of JP '478 clearly does not have "wheels mounted to the bottom plate" of the outer box. See FIGs. 1-4 of JP '478. For this same reason, JP '478 clearly also fails to disclose and/or provide common sense reasoning for the limitation of claim 1 of the present application that "the height of the supports is greater than the height that each of the wheels extends from the bottom plate of the outer box such that the outer box is supported on said wheels only when the outer box is inclined on a floor face." Note the wheels required by amended claim 1 of the present application must be "mounted" directly to the bottom plate of the outer box and must support the outer box on a "floor face" when the outer box itself is inclined "on" the floor surface. Thus, the transport box and its load is required to be "on the floor surface" when the wheels support the transport box for "man-powered transportation" and is not simply supported on a separate piece of equipment (such as the tangs of a fork lift truck).

The rejection in the Office Action relies on the wheels of a fork lift truck as the wheels mounted on the bottom plate of the transport box and relies on the transport box to be inclined solely due to the disposition of the tangs of the fork lift truck. As stated above, Applicants request fair reconsideration because claim 1 of the present application requires the wheels to be mounted directly on the bottom plate of the transport box and not as part of a separate piece of equipment. In addition, JP '478 does not require the container to be inclined. Paragraph 0024 of JP '478 states nothing concerning any inclination of the container. Still further, the relative size of the wheels of the fork lift truck and that of the slots (4) of JP '478 is not disclosed. Common sense would indicate that the wheels of the fork lift truck would have a much greater size than the slots (4) of the pallet (6) which are merely required to receive the tangs of a fork lift. In any

case, there would be no common sense reason for the wheels of a separate fork lift truck to extend a lesser distance from the container of JP '478 than that of the supports defining slots (4).

Still further, the transport box of the present application is for use in transporting a sputtering target from the sputtering target manufacturing plant to a workshop having a sputtering chamber where semiconductor thin films are formed. The high purity sputtering targets are expensive, must remain pure and uncontaminated, and can be relatively heavy and/or relatively fragile. Further, during transport, the box may be lifted with industrial forklifts and like machinery, and transported on beds of trucks or like vehicles; however, they must additionally be manually transported through sensitive parts of the semiconductor manufacturing facility and workshops. In the later case, the use of a fork lift truck or like separate piece of equipment is not allowed due to the sensitivities of the workshop and/or sputtering chamber.

When supported on a truck bed or the like, the transport box of the present invention is supported in a stable manner on the stationary supports. See FIG. 2, reference numeral 25, of the present application, as filed. As best stated on page 5, lines 14-28, of the present application, as filed, this ensures prevention of swaying and other undesired movements of the transport box during shipment. In addition, the supports enable the placement of forks of a forklift truck to be inserted therebetween thereby enabling ready pickup and lifting of the transport box onto or off of the truck bed. See page 5, lines 14-16, of the present application, as filed. Thus, in a so-called "resting state" of the transport box, the supports attached to the bottom plate of the outer box are taller than the height of the wheels mounted to the bottom plate. Thus, the transport box cannot rotate on the wheels and a non-skid function is provided.

However, when the transport box of the present invention requires manual transport through a sensitive part of a building within a workshop, sputtering chamber, or the like, the

transport box can be tilted onto its rear edge (i.e., the rear edge of the transport box itself) and rolled via the set of wheels mounted only adjacent the rear edge of the transport box. See FIG. 2, reference numeral 24, of the present application, as filed. This is accomplished without any additional piece of equipment such as a fork lift truck having a lifting means. This is entirely different from the transport taught and enabled by JP '478 which requires use of a separate fork lift truck having a lifting means and wheels.

Thus, the height of the supports of the transport box of the present invention is required to be greater than the height (or diameter) of the wheels so that the transport box is supported solely on the supports when located on the truck bed. See page 5, lines 24-28, of the present application, as filed. However, when manually tilted and/or inclined relative to the underlying floor face or surface, the transport box can be readily and manually wheeled through the building, workshop or sputtering chamber with the wheels being in contact with the floor face.

Finally, claim 1 of the present application requires an inner sputtering target retention frame defining a void the size of the sputtering target. The sputtering target is positioned in the void within the retention frame, and the retention frame prevents movement of the sputtering target relative to the retention frame. This is simply not taught by JP '478 which merely discloses slots in the sidewalls of a container for supporting large sheets of glass. See FIG. 4 of JP '478.

Applicants respectfully submit that the wheel-less double-box container of JP '478 clearly fails to disclose, teach or suggest and fails to obviate the transport box required by claim 1, as amended, of the present application.

Accordingly, Applicants respectfully request reconsideration and removal of the §103(a) rejection of claims 1 and 11-30 as being obvious over JP '478 in view of JP '122.

III. Conclusion

In view of the above amendments and remarks, Applicants respectfully submit that the claim rejections have been overcome and that the present application is in condition for allowance. Thus, a favorable action on the merits is therefore requested.

Please charge any deficiency or credit any overpayment for entering this Amendment to our deposit account no. 08-3040.

Respectfully submitted,
Howson & Howson LLP
Attorneys for Applicants

By /William Bak/
William Bak
Reg. No. 37,277
501 Office Center Drive
Suite 210
Fort Washington, PA 19034
(215) 540-9216